

BOTANICAL SOCIETY OF EDINBURGH.

Feb. 14, 1850.—Professor Fleming, in the Chair.

Mr. M'Nab exhibited the flowering rachis with terminal bracts of the red-fruited variety of *Musa sapientum*, and stated that the plant in the Botanic Garden was received from Mr. Lockhart, Botanic Garden, Trinidad, during the year 1842. It had frequently ripened its fruit in the Botanic Garden at Edinburgh. The plant which produced the rachis shown was only twenty months from the sucker state when it first showed its fruit in May 1849. It continued to ripen gradually till the end of December, when a few of the first, or best ripened of the fruits, were gathered. The rachis, from the point to its insertion into the plant, was 6 feet long, and produced five matured clusters averaging 8–9 lbs. each in weight, and each having fifteen perfect and well swelled fruits. Besides the five perfect clusters, it had two imperfect ones, with fifteen immature fruits, varying from 1 to 3 inches long. The fruiting plant is 14 ft. 6 in. in height above the tub, exclusive of its leaves, which are 10 ft. long and 2 ft. 6 in. broad; the stem is 35 inches in circumference at its base. The weight of the head of fruit, when in its perfect state, was estimated at from 75 lbs. to 80 lbs. The plant is one of the largest in cultivation, and also one of the most prolific, the fruit ripening successively over a period of two months.

Mr. M'Nab made the following report of plants in flower in the Botanic Garden, &c. :—

Feb. 8. *Rhododendron dauricum* in flower, sparingly, in Botanic Garden.

9. *Eranthis hyemalis* in flower in Dr. Neill's Garden.

11. *Galanthus nivalis* in flower in Botanic Garden—*Gentiana verna* flowering in a cold frame in Dr. Neill's Garden.

14. *Galanthus plicatus* in flower in Botanic Garden.

14. *Tussilago fragrans*, *Helleborus foetidus*, *Primula veris*, *P. vulgaris*, *Eranthis hyemalis*, *Garrya elliptica*, *Arbutus Unedo*, *Viburnum Tinus*, *Cydonia japonica*, and cultivated varieties of *Viola tricolor*, in flower in Botanic Garden.

14. *Helleborus odoratus* and *H. atro-purpureus* in flower in Experimental Garden.

14. *Hepatica triloba* and *Corylus Avellana* in flower in Dr. Neill's Garden.

The following papers were read :—

1. "Notice of some of the rare Plants observed in Orkney during the Summer of 1849," by John T. Syme, Esq. (See p. 266.)

2. "On the Embryogeny of *Hippuris vulgaris*," by John Scott Sanderson, Esq. (See p. 259.)

3. "Account of an Excursion from Simla to the Burenda Pass, and other parts of the Himalaya, in July and August 1847," by Lieutenant Robert Maclagan, Bengal Engineers, Principal of the College of Civil Engineers, Roorkee, North-West Provinces of India. The author of this paper left Simla on the 10th of July 1847, and

proceeded to Nagkhunda; thence he visited the hill called Whartoo or Huttoo, and followed the valley of the Pubhur. A general account was given of the vegetation of the district, and remarks made on its geological features, natural scenery, and the modes of travelling through it. The summit of the Burenda Pass was reached on the 21st. The elevation of the pass was found, on a rough estimate, to be 15,263 feet above the level of the sea. Goitre was noticed as prevalent among the inhabitants of these regions. The village of Booroon was visited. It is situated about 1500 feet above the river Buspa, near its confluence with the Sutlej. Vineyards were common in this district (which receives the name of *Koonawur*), and apricots are abundantly cultivated, both on account of their fruit and the oil which is obtained from the kernels. From Booroon Mr. Maclagan ascended the river Sutlej to Pooree and Zginam; and, after crossing a hill called Skerung, reached Nesung. He subsequently ascended the Sutlej to Namja, a village close to the Chinese frontier. He described the general features of the Tartars, their dress and habits; and also noticed the shawl goat and the yak (*Bos grunniens*). Leaving Namja he reached the Chinese village of Shipkee, and afterwards passed through Keookh without interruption, following the Sutlej as far as the junction of two roads, one leading to Garoo and the other to Chapnung. From this point he returned to Shipkee and Namja, and thence followed the Spiti to Shalkur, a so-called fort in lat. 32° , long. $78^{\circ} 30'$. He crossed the Lapcha Pass, which is about 13,800 ft. above the level of the sea, and rested at Dunker on the 14th August. The fossil locality near Geoongool was examined. The Taree Pass was ascended on the 16th. This pass is, on a rough calculation, about 16,000 feet above the level of the sea. On the summit of the Pass at sunrise the thermometer stood at 35° Fahr. After crossing the pass, the author journeyed by Rampoor to Simla, which he reached on 1st September 1847. The plants met with during the route were noticed, and specimens of several of them were exhibited at the meeting. The following is a list of the natural orders to which the plants observed during the trip belonged, with the names of the genera and of the species, so far as they were ascertained:—

Ranunculaceæ.—*Ranunculus*, *Delphinium velutinum*, and another species; *Anemone*, two species; *Aquilegia glauca*, *Clematis graveolens*.

Papaveraceæ.—*Meconopsis aculeata*.

Cruciferae.—*Erysimum* like *E. cheiranthoides*, *Sisymbrium*, *Draba*.

Capparidaceæ.—*Capparis*.

Tamaricaceæ.—*Tamarix*.

Caryophyllaceæ.—*Stellaria*, two species; *Silene*, a species very like *S. italica*; *Cerastium*; *Dianthus*, two species; *Sagina*, *Lychnis*, *Spergula*, &c.

Malvaceæ.—*Sida*.

Sapindaceæ.—*Æsculus*.

Geraniaceæ.—*Geranium*, three species; *Erodium*.

Oxalidaceæ.—*Oxalis corniculata*.

Leguminosæ.—*Lotus corniculatus*, *Lespedeza juncea*?

- Rosaceæ*.—*Rosa tetrapetala* and another species, *Potentilla atrosanguinea*, *P. nepalensis* and two others, *Spiræa vacciniifolia*, *S. Lindleyana*, *Sibbaldia purpurea*, *Fragaria vesca*, *Agrimonia nepalensis*, *Armeniaca vulgaris*.
- Onagraceæ*.—*Epilobium laxum*, *E. angustifolium* var., and another species.
- Crassulaceæ*.—*Sempervivum*, and another genus.
- Grossulariaceæ*.—*Ribes glacialis* and another species.
- Umbelliferae*.—*Hymenolæna*, *Pycnocycla glauca*, *Chærophyllum*, *Bupleurum*, and *Myrrhis*?
- Rubiaceæ*.—*Asperula odorata*?, *Galium*, and another undetermined.
- Compositæ*.—*Aster*, *Erigeron* like *E. alpinus*; *Gnaphalium*, two species; *Antennaria*, *Scorzonera*; *Achillæa*, two species; *Artemisia*, *Calameris Doronicum*, *Prenanthes*, *Senecio*, and two other genera.
- Vacciniaceæ*.—*Vaccinium*.
- Aquifoliaceæ*.—*Ilex*.
- Jasminaceæ*.—*Jasminum*.
- Oleaceæ*.—*Fraxinus* like *F. xanthoxyloides*.
- Gentianaceæ*.—*Gentiana*, three species, and another genus.
- Polemoniaceæ*.—*Polemonium cæruleum*.
- Convolvulaceæ*.—*Ipomæa*.
- Boraginaceæ*.—*Myosotis*, two species; *Echinospermum*?, *Anchusa tinctoria*.
- Scrophulariaceæ*.—*Veronica*; *Pedicularis*, two species; and *Euphrasia officinalis*.
- Labiatae*.—*Acinos*, *Calamintha*, *Salvia*, *Prunella* like *P. vulgaris*, *Colquhounia vestita*? and other two genera, one of which is like *Hyssopus*.
- Verbenaceæ*.—*Verbena* like *V. officinalis*.
- Acanthaceæ*.—*Morina longifolia*, and a genus like *Justicia*.
- Primulaceæ*.—*Androsace rotundifolia*.
- Plantaginaceæ*.—*Plantago*.
- Polygonaceæ*.—*Rumex* like *R. hastatus*, *Polygonum* like *P. Brunonis*, and another genus.
- Euphorbiaceæ*.—*Euphorbia cashmeriana*?
- Amentaceæ*.—*Betula*, *Fagus*.
- Juglandaceæ*.—*Juglans*.
- Coniferae*.—*Taxus baccata*?, *Pinus Neoza*, *Abies*, and a genus like *Callitris*.
- Orchidaceæ*.—*Orchis*.
- Zingiberaceæ*.—*Roscoea alpina*?
- Liliaceæ*.—*Lloydia Kunawurensis*?
- Cyperaceæ*.—*Carex*; *Cyperus*, two species, one of which is like *C. muricata*.
- Gramineæ*.—*Phalaris*, *Alopecurus pratensis*; *Bromus* (like *B. erectus*); *Milium*, two species; *Phleum*, two species; *Poa*, one like *P. annua*; *Setaria*, *Triticum*, *Stipa* like *S. pennata*, and *Dactylis glauca*.
- Filices*.—*Adiantum Capillus-Veneris*, and others.